ENERGY STAR® Application for Certification

81

ENERGY STAR ® Score[1]

Lovejoy Wharf

Registry Name: Lovejoy Wharf
Property Type: Office
Gross Floor Area (ft²): 236,688
Built: 2015

For Year Ending: 01/31/2017[2]
Date Application Becomes Ineligible: 05/31/2017

1. The ENERGY STAR Score is based on total source energy. A score of 75 is the minimum to be eligible for the ENERGY STAR.
2. Applications must be submitted to EPA within 120 days of the Year Ending Date. The award is not final until approval is received from EPA.

Please use the *Licensed Professional's Guide to the ENERGY STAR ® for Commercial Buildings* for reference in completing this checklist (http://www.energystar.gov/lpguide).

Property & Contact Information

Property Address
Lovejoy Wharf
160 N. Washington St.
Boston, Massachusetts 02144

Property ID: 4975663
Boston Energy Reporting ID: 0303060001

Property Owner
Union Investment Real Estate GmbH
Valentinskamp 70 / EMPORIO
Hamburg, Hamburg 20355
+49 40 34919 - 0

Primary Contact
Josh Schubert
33 North LaSalle Street
Suite 500
Chicago, IL 60602
(312) 242-1792
jschubert@gobyinc.com

1. Review of Whole Property Characteristics

Basic Property Information

1) **Property Name for Registry:** Lovejoy Wharf

Is this the official name to be displayed in the Registry of ENERGY STAR Certified Buildings and Plants? ☑ Yes ☐ No

If "No", please specify: _____

2) **Property Type:** Office

Is this an accurate description of the primary use of this property? ☑ Yes ☐ No

3) Location:

160 N. Washington St.
Boston, Massachusetts 02144

Is this correct and complete? ☑ Yes ☐ No

4) Gross Floor Area: 236,688 ft²

Does this represent the entire property? (i.e., no part of the building/property was excluded/subtracted from the total) If "no" please specify what space has been excluded. ☑ Yes ☐ No

5) Average Occupancy (%): (b) (4)

Is this occupancy percentage accurate for the entire 12 month period being assessed? ☑ Yes ☐ No

6) Number of Buildings: 1

Does this number accurately represent all structures? ☑ Yes ☐ No

Notes:

Indoor Environmental Standards

1) Ventilation for Acceptable Indoor Air Quality

Does this property meet the minimum ventilation rates according to ANSI/ASHRAE Standard 62.1, Ventilation for Acceptable Indoor Air Quality? ☑ Yes ☐ No

2) Acceptable Thermal Environmental Conditions

Does this property meet acceptable thermal environmental conditions according to ANSI/ASHRAE Standard 55, Thermal Environmental Conditions for Human Occupancy? ☑ Yes ☐ No

3) Adequate Illumination

Does this property meet the minimum illumination levels as recommended by the Illuminating Engineering Society of North America (IESNA) Lighting Handbook? ☑ Yes ☐ No

Notes:

2. Review of Property Use Details

Retail Store: Retail Store Use

This Use Detail is used to calculate the 1-100 ENERGY STAR Score.

1) Gross Floor Area: 5,280

Is this the total size, as measured between the outside surface of the exterior walls of the building(s)? This includes all areas inside the building(s) such as: occupied tenant areas, common areas, meeting areas, break rooms, restrooms, elevator shafts, mechanical equipment areas, and storage rooms. Gross Floor Area should not include interstitial plenum space between floors, which may house pipes and ventilation. Gross Floor Area is not the same as rentable, but rather includes all area inside the building(s). Leasable space would be a sub-set of Gross Floor Area. In the case where there is an atrium, you should count the Gross Floor Area at the base level only. Do not increase the size to accommodate open atrium space at higher levels. The Gross Floor Area should not include any exterior spaces such as balconies or exterior loading docks and driveways.

☑ Yes ☐ No

2) Weekly Operating Hours: [redacted]

Is this the total number of hours per week that the property is open to the public?

☑ Yes ☐ No

3) Number of Workers on Main Shift: [redacted]

Is this the total number of workers present during the primary shift? This is not a total count of workers, but rather a count of workers who are present at the same time. For example, if there are two daily eight hour shifts of 100 workers each, the Number of Workers on Main Shift value is 100. Number of Workers on Main Shift may include employees of the property, sub-contractors who are onsite regularly, and volunteers who perform regular onsite tasks. Number of Workers should not include visitors to the buildings such as clients, customers, or patients.

☑ Yes ☐ No

4) Number of Computers: (b) (4)

Is this the total number of computers, laptops, and data servers at the property? This number should not include tablet computers, such as iPads, or any other types of office equipment.

☑ Yes ☐ No

5) Number of Cash Registers: (b) (4)

Is this the total number cash registers? Cash registers are defined as physical machines that are used primarily for conducting transactions and indicating to customers the amounts of individual sales; they record and total receipts, may automatically calculate the change due, and often include a money drawer from which to make change. Handheld point of sale devices should not be included.

☑ Yes ☐ No

6) Number of Open or Closed Refrigeration/Freezer Units: (b) (4)

Is this the count of open or closed cases that are used for the sale or storage of perishable goods? This includes display-type refrigerated open or closed cases and cabinets as well as display-type freezer units typically found on a sales floor. Each case or cabinet section, typically 4 to 12 feet in length, should be considered 1 unit. Include those cases located inside and immediately adjacent to the building. These units may be portable or permanent, and may have doors, plastic strips, or other flexible cover. This count should not include vending machines.

☑ Yes ☐ No

7) Number of Walk-in Refrigeration/Freezer Units: (b) (4)

Is this the total count of walk-in units at the property? Walk-in Refrigeration/Freezers are typically very large units located in storage areas or commercial kitchens that would

☑ Yes ☐ No

not be accessible to all building occupants. This count should only include large storage units that a person actually walks into in order to store or retrieve perishable goods.

8) Single Store: 100% Yes

Is this property a single store? ☑ Yes ☐ No

9) Exterior Entrance to the Public: 100% Yes

Is this the correct answer to whether the property has an exterior entrance through which customers enter from the outside? If patrons must enter through an interior entrance, such as from within a mall or an atrium in a mixed use establishment, this is not considered an exterior entrance. ☑ Yes ☐ No

10) Percent That Can Be Heated: (b) (4)

Is this the total percentage of the property that can be heated by mechanical equipment? ☑ Yes ☐ No

11) Percent That Can Be Cooled: (b) (4)

Is this the total percentage of the property that can be cooled by mechanical equipment? This includes all types of cooling from central air to individual window units. ☑ Yes ☐ No

Notes:

Office: (b) (4)

This Use Detail is used to calculate the 1-100 ENERGY STAR Score.

1) Gross Floor Area: 596

Is this the total size, as measured between the outside surface of the exterior walls of the building(s)? This includes all areas inside the building(s) such as: occupied tenant areas, common areas, meeting areas, break rooms, restrooms, elevator shafts, mechanical equipment areas, and storage rooms. Gross Floor Area should not include interstitial plenum space between floors, which may house pipes and ventilation. Gross Floor Area is not the same as rentable, but rather includes all area inside the building(s). Leasable space would be a sub-set of Gross Floor Area. In the case where there is an atrium, you should count the Gross Floor Area at the base level only. Do not increase the size to accommodate open atrium space at higher levels. The Gross Floor Area should not include any exterior spaces such as balconies or exterior loading docks and driveways. ☑ Yes ☐ No

2) Weekly Operating Hours: (b) (4)

Is this the total number of hours per week that the property is occupied by the majority of the employees? It does not include hours when the HVAC system is starting up or shutting down, or when property is occupied only by maintenance, security, cleaning staff, or other support personnel. For properties with a schedule that varies during the year, use the schedule most often followed. ☑ Yes ☐ No

3) Number of Workers on Main Shift: (b) (4)

Is this the total number of workers present during the primary shift? This is not a total count of workers, but rather a count of workers who are present at the same time. For example, if there are two daily eight hour shifts of 100 workers each, the Number of Workers on Main Shift value is 100. Number of Workers on Main Shift may include employees of the property, sub-contractors who are onsite regularly, and volunteers who perform regular onsite tasks. Number of Workers should not include visitors to the buildings such as clients, customers, or patients.

☑ Yes ☐ No

4) Number of Computers: (b) (4)

Is this the total number of computers, laptops, and data servers at the property? This number should not include tablet computers, such as iPads, or any other types of office equipment.

☑ Yes ☐ No

5) Percent That Can Be Heated: (b) (4)

Is this the total percentage of the property that can be heated by mechanical equipment?

☑ Yes ☐ No

6) Percent That Can Be Cooled: (b) (4)

Is this the total percentage of the property that can be cooled by mechanical equipment? This includes all types of cooling from central air to individual window units.

☑ Yes ☐ No

Notes:

Office: Building Use

This Use Detail is used to calculate the 1-100 ENERGY STAR Score.

1) Gross Floor Area: 230,812

Is this the total size, as measured between the outside surface of the exterior walls of the building(s)? This includes all areas inside the building(s) such as: occupied tenant areas, common areas, meeting areas, break rooms, restrooms, elevator shafts, mechanical equipment areas, and storage rooms. Gross Floor Area should not include interstitial plenum space between floors, which may house pipes and ventilation. Gross Floor Area is not the same as rentable, but rather includes all area inside the building(s). Leasable space would be a sub-set of Gross Floor Area. In the case where there is an atrium, you should count the Gross Floor Area at the base level only. Do not increase the size to accommodate open atrium space at higher levels. The Gross Floor Area should not include any exterior spaces such as balconies or exterior loading docks and driveways.

☑ Yes ☐ No

2) Weekly Operating Hours: (b) (4)

Is this the total number of hours per week that the property is occupied by the majority of the employees? It does not include hours when the HVAC system is starting up or shutting down, or when property is occupied only by maintenance, security, cleaning

☑ Yes ☐ No

staff, or other support personnel. For properties with a schedule that varies during the year, use the schedule most often followed.

3) Number of Workers on Main Shift: (b) (4)

Is this the total number of workers present during the primary shift? This is not a total count of workers, but rather a count of workers who are present at the same time. For example, if there are two daily eight hour shifts of 100 workers each, the Number of Workers on Main Shift value is 100. Number of Workers on Main Shift may include employees of the property, sub-contractors who are onsite regularly, and volunteers who perform regular onsite tasks. Number of Workers should not include visitors to the buildings such as clients, customers, or patients.

☑ Yes ☐ No

4) Number of Computers: (b) (4)

Is this the total number of computers, laptops, and data servers at the property? This number should not include tablet computers, such as iPads, or any other types of office equipment.

☑ Yes ☐ No

5) Percent That Can Be Heated: (b) (4)

Is this the total percentage of the property that can be heated by mechanical equipment?

☑ Yes ☐ No

6) Percent That Can Be Cooled: (b) (4)

Is this the total percentage of the property that can be cooled by mechanical equipment? This includes all types of cooling from central air to individual window units.

☑ Yes ☐ No

Notes:

3. Review of Energy Consumption

Data Overview

Site Energy Use Summary	
Electric - Grid (kBtu)	(b) (4)
Natural Gas (kBtu)	
Total Energy (kBtu)	15,855,669.1
Energy Intensity	
Site (kBtu/ft²)	67
Source (kBtu/ft²)	171.9

National Median Comparison	
National Median Site EUI (kBtu/ft²)	101.5
National Median Source EUI (kBtu/ft²)	260.4
% Diff from National Median Source EUI	-34%
Emissions (based on site energy use)	
Greenhouse Gas Emissions (Metric Tons CO2e)	1,213.8

Power Generation Plant or Distribution Utility:
NSTAR Co [Eversource Energy]

Note: All values are annualized to a 12-month period. Source Energy includes energy used in generation and transmission to enable an equitable assessment.

Summary of All Associated Meters

The following meters are associated with the property, meaning that they are added together to get the total energy use for the property. Please see additional tables in this checklist for the exact meter consumption values.

Meter Name	Fuel Type	Start Date	End Date	Associated With
(b) (4)	Electric	01/15/2016	In Use	Lovejoy Wharf
	Electric	01/15/2016	In Use	Lovejoy Wharf
	Electric	12/30/2015	In Use	Lovejoy Wharf
	Electric	01/15/2016	In Use	Lovejoy Wharf
	Electric	08/15/2015	11/17/2016	Lovejoy Wharf
	Natural Gas	01/15/2016	In Use	Lovejoy Wharf
	Electric	04/01/2016	In Use	Lovejoy Wharf
	Electric	01/15/2016	04/01/2016	Lovejoy Wharf

Total Energy Use

☑ **Yes** ☐ **No**

Do the meters shown above account for the total energy use of this property during the reporting period of this application?

Additional Fuels

☑ **Yes** ☐ **No**

Do the meters above include all fuel *types* at the property? That is, no additional fuels such as district steam, generator fuel oil have been excluded.

On-Site Solar and Wind Energy

☑ **Yes** ☐ **No**

Are all on-site solar and wind installations reported in this list (if present)? All on-site systems must be reported.

Notes:

Meter (b) (4) was replaced by meter (b) (4) on 4/1/2016. The deduct meter was a submeter that was supplying energy to the neighboring property, which is why the entries are negative as the energy is not part of the total consumption.

Electric Meter: [redacted] (kWh (thousand Watt-hours))

Associated With: Lovejoy Wharf

Start Date	End Date	Usage	Green Power?
01/15/2016	02/18/2016	16,248	No

Start Date	End Date	Usage	Green Power?
02/18/2016	03/17/2016	(b) (4)	No
03/17/2016	03/31/2016		No
03/31/2016	04/18/2016		No
04/18/2016	05/17/2016		No
05/17/2016	06/19/2016		No
06/19/2016	07/18/2016		No
07/18/2016	08/16/2016		No
08/16/2016	09/19/2016		No
09/19/2016	10/18/2016		No
10/18/2016	11/17/2016		No
11/17/2016	12/18/2016		No
12/18/2016	01/18/2017		No
01/18/2017	02/16/2017		No
	Total Consumption (kWh (thousand Watt-hours)):	(b) (4)	
	Total Consumption (kBtu (thousand Btu)):		

Total Energy Consumption for this Meter

☑ **Yes** ☐ **No**

Do the fuel consumption totals shown above include consumption of all energy tracked through this meter that affect energy calculations for the reporting period of this application (i.e., do the entries match the utility bills received by the property)?

Notes:

The meter consumption from 3/17/2016 to 3/31/2016 and 3/31/2016 to 04/18/2016 are shorter than normal durations which is why the consumption is smaller than normal.

Electric Meter: (b) (4) (kWh (thousand Watt-hours))

Associated With: Lovejoy Wharf

Start Date	End Date	Usage	Green Power?
01/20/2016	02/18/2016	(b) (4)	No
02/18/2016	03/20/2016		No
03/20/2016	03/31/2016		No
03/31/2016	04/19/2016		No
04/19/2016	05/18/2016		No
05/18/2016	06/19/2016		No
06/19/2016	07/19/2016		No

Start Date	End Date	Usage	Green Power?
07/19/2016	08/17/2016	(b) (4)	No
08/17/2016	09/19/2016		No
09/19/2016	10/19/2016		No
10/19/2016	11/17/2016		No
11/17/2016	12/19/2016		No
12/19/2016	01/19/2017		No
01/19/2017	02/16/2017		No

Total Consumption (kWh (thousand Watt-hours)): (b) (4)

Total Consumption (kBtu (thousand Btu)):

Total Energy Consumption for this Meter

☑ **Yes** ☐ **No**

Do the fuel consumption totals shown above include consumption of all energy tracked through this meter that affect energy calculations for the reporting period of this application (i.e., do the entries match the utility bills received by the property)?

Notes:

The meter consumption from 3/20/2016 to 3/31/2016 and 3/31/2016 to 04/19/2016 are shorter than normal durations which is why the consumption is smaller than normal.

Electric Meter: (b) (4) (kWh (thousand Watt-hours))

Associated With: Lovejoy Wharf

Start Date	End Date	Usage	Green Power?
01/14/2016	02/14/2016	(b) (4)	No
02/14/2016	03/14/2016		No
03/14/2016	04/14/2016		No
04/14/2016	05/14/2016		No
05/14/2016	06/14/2016		No
06/14/2016	07/14/2016		No
07/14/2016	08/14/2016		No
08/14/2016	09/14/2016		No
09/14/2016	09/25/2016		No
09/25/2016	11/14/2016		No
11/14/2016	12/14/2016		No
12/14/2016	01/14/2017		No
01/14/2017	02/14/2017		No

Total Consumption (kWh (thousand Watt-hours)):	(b) (4)
Total Consumption (kBtu (thousand Btu)):	

Total Energy Consumption for this Meter

☑ **Yes** ☐ **No**

Do the fuel consumption totals shown above include consumption of all energy tracked through this meter that affect energy calculations for the reporting period of this application (i.e., do the entries match the utility bills received by the property)?

Notes:

Electric Meter: (b) (4) (kWh (thousand Watt-hours))

Associated With: Lovejoy Wharf

Start Date	End Date	Usage	Green Power?
01/20/2016	02/18/2016	(b) (4)	No
02/18/2016	03/31/2016		No
03/31/2016	04/19/2016		No
04/19/2016	05/18/2016		No
05/18/2016	06/19/2016		No
06/19/2016	07/19/2016		No
07/19/2016	08/17/2016		No
08/17/2016	09/19/2016		No
09/19/2016	10/19/2016		No
10/19/2016	11/17/2016		No
11/17/2016	12/19/2016		No
12/19/2016	01/19/2017		No
01/19/2017	02/16/2017		No

Total Consumption (kWh (thousand Watt-hours)):	(b) (4)
Total Consumption (kBtu (thousand Btu)):	

Total Energy Consumption for this Meter

☑ **Yes** ☐ **No**

Do the fuel consumption totals shown above include consumption of all energy tracked through this meter that affect energy calculations for the reporting period of this application (i.e., do the entries match the utility bills received by the property)?

Notes:

Electric Meter: (b) (4) kWh (thousand Watt-hours))

Associated With: Lovejoy Wharf

Start Date	End Date	Usage	Green Power?
01/20/2016	02/18/2016	(b) (4)	No
02/18/2016	03/20/2016		No
03/20/2016	03/31/2016		No
03/31/2016	04/19/2016		No
04/19/2016	05/18/2016		No
05/18/2016	06/19/2016		No
06/19/2016	07/19/2016		No
07/19/2016	08/17/2016		No
08/17/2016	09/19/2016		No
09/19/2016	10/19/2016		No
10/19/2016	11/17/2016		No
	Total Consumption (kWh (thousand Watt-hours)):	(b) (4)	
	Total Consumption (kBtu (thousand Btu)):		

Total Energy Consumption for this Meter

☑ **Yes** ☐ **No**

Do the fuel consumption totals shown above include consumption of all energy tracked through this meter that affect energy calculations for the reporting period of this application (i.e., do the entries match the utility bills received by the property)?

Notes:

Natural Gas Meter: (b) (4) (therms)

Associated With: Lovejoy Wharf

Start Date	End Date	Usage
01/15/2016	02/02/2016	(b) (4)
02/02/2016	03/31/2016	
03/31/2016	05/04/2016	
05/04/2016	06/06/2016	
06/06/2016	07/06/2016	
07/06/2016	08/08/2016	
08/08/2016	09/01/2016	
09/01/2016	10/06/2016	
10/06/2016	11/04/2016	
11/04/2016	12/06/2016	
12/06/2016	01/03/2017	
01/03/2017	02/03/2017	
	Total Consumption (therms):	
	Total Consumption (kBtu (thousand Btu)):	

Total Energy Consumption for this Meter

☑ **Yes** ☐ **No**

Do the fuel consumption totals shown above include consumption of all energy tracked through this meter that affect energy calculations for the reporting period of this application (i.e., do the entries match the utility bills received by the property)?

Notes:

The meter consumption from 02/02/2016 to 3/31/2016 is a longer than normal duration which is why the consumption is larger than normal.

Electric Meter: (b) (4)) (kWh (thousand Watt-hours))

Associated With: Lovejoy Wharf

Start Date	End Date	Usage	Green Power?
04/01/2016	04/19/2016	(b) (4)	No
04/19/2016	05/18/2016		No
05/18/2016	06/19/2016		No
06/19/2016	07/19/2016		No
07/19/2016	08/17/2016		No

Start Date	End Date	Usage	Green Power?
08/17/2016	09/19/2016	(b) (4)	No
09/19/2016	10/19/2016		No
10/19/2016	11/17/2016		No
11/17/2016	12/19/2016		No
12/19/2016	01/19/2017		No
01/19/2017	02/19/2017		No

Total Consumption (kWh (thousand Watt-hours)): (b) (4)

Total Consumption (kBtu (thousand Btu)):

Total Energy Consumption for this Meter

☑ **Yes** ☐ **No**

Do the fuel consumption totals shown above include consumption of all energy tracked through this meter that affect energy calculations for the reporting period of this application (i.e., do the entries match the utility bills received by the property)?

Notes:

The meter consumption from 04/1/2016 to 04/19/2016 is a shorter than normal duration which is why the consumption is smaller than normal.

Electric Meter: (b) (4) (kWh (thousand Watt-hours))

Associated With: Lovejoy Wharf

Start Date	End Date	Usage	Green Power?
01/20/2016	02/18/2016	(b) (4)	No
02/18/2016	03/20/2016		No
03/20/2016	04/01/2016		No

Total Consumption (kWh (thousand Watt-hours)): (b) (4)

Total Consumption (kBtu (thousand Btu)):

Total Energy Consumption for this Meter

☑ **Yes** ☐ **No**

Do the fuel consumption totals shown above include consumption of all energy tracked through this meter that affect energy calculations for the reporting period of this application (i.e., do the entries match the utility bills received by the property)?

Notes:

The meter consumption from 3/20/2016 to 4/1/2016 is a shorter than normal duration which is why the consumption is smaller than normal.

4. Signature & Stamp of Verifying Licensed Professional

Robert Rugala (Name) visited this site on 1/3/2017 (Date). Based on the conditions observed at the time of the visit to this property, I verify that the information contained within this application is accurate and in accordance with the Licensed Professional Guide.

Signature: _____ Date: 5/5/2017

Licensed Professional
License: 062062673 in IL
License: 50274 in MN
License: 76431 in FL
License: 115248 in TX
License: 43907-6 in WI
License: M 37645 in CA
License: PE084775 in PA
License: 097019 in NY

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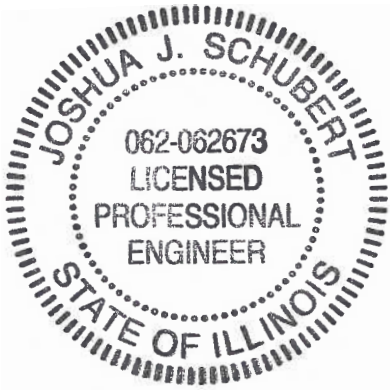

Professional Engineer Stamp

NOTE: When applying for the ENERGY STAR, the signature of the Verifying Professional must match the stamp.

5. Signatory Agreement

I hereby nominate the above described property for award of the ENERGY STAR. I have provided a copy of the Licensed Professionals Guide to the ENERGY STAR for Commercial Buildings to our Licensed Professional (LP) for reference. As documented by the above checklist, this property meets the conditions necessary to qualify as ENERGY STAR. I am submitting this application within four months of the Year Ending Date (January 31, 2017) used to generate the application. I will assist EPA, if requested, in verifying any data included in this application.

Furthermore, I agree to associate the ENERGY STAR logo only with this property and to adhere to the ENERGY STAR Identity Guidelines.

AS Managing Agent

Signature (must be a direct employee of the building owner/manager): Erin Orpik Date: 5/26/17

Signatory Name: Erin Orpik

Property Owner: Union Investment Real Estate GmbH